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AUG 24 2007**REMARKS****35 U.S.C. § 103(a)**

Claims 1, 2, 9, 10, 12-14, 18, and 19 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Baumgartner, et al. (U.S. Patent No. 2004/0113524) in view of Hogg (U.S. Patent No. 7,046,488) and Amano (U.S. Patent No. 7,032,454). Claims 3, 4, and 15 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Baumgartner, et al. in view of Hogg and Amano, and further in view of Baxter, et al. (U.S. Patent No. 5,407,854). Claims 5, 6, and 16 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Baumgartner, et al. in view of Hogg, Amano, and Horowitz, et al. (The Art of Electronics). Claim 11 was rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Baumgartner, et al. in view of Hogg, Amano, and Nakamura (U.S. Patent No. 5,225,958). Applicants respectfully request reconsideration of the rejections of claims 1-6, 9-16, 18 and 19, including independent claims 1 and 12.

Independent claims 1 and 12 were rejected based on three references. In general, Baumgartner, et al. disclose capacitive membrane ultrasound transducers (CMUT) where a flexible membrane over a gap with electrodes on opposite sides of the gap transduces between electrical and acoustic energies. Hogg discloses a transistor for protecting a reading head of a disk drive. The reading head is protected from electrostatic discharge (ESD) by sharing and grounding the head terminals (col. 4, line 65-col. 5, line 4).

In order to tie the very different CMUT together with the ESD protection circuit of the reading head, the Examiner cites to Amano. Amano notes susceptibility of an active capacitive sensor to ESD (col. 1, lines 62-64). However, the active capacitive sensor has two exposed sensor plates forming a sensor array of exposed plates (col. 1, lines 50-52). This structure is much different than a CMUT, with at least one of the electrodes spaced from the surface (i.e., not exposed). The ESD vulnerability teaching of Amano is not applicable to the different structure CMUT

with the electrodes spaced from the surface, so a person of ordinary skill in the art would not have sought ESD protection of a CMUT and would not have looked into teachings such as Hogg.

Amano also teaches using a different structure than the ESD vulnerable active capacitive sensor array (col. 2, lines 50-67). After noting the ESD problem with old active capacitive sensors in the background, Amano teaches avoiding the problem by using a layered electrode structure with a flexing cantilever (col. 5, lines 28-52). Rather than an ESD protection circuit to solve the problems of the prior art, a structural change is made. The structural change provides a structure more similar to a CMUT (layered electrodes with a flexible member). A person of ordinary skill would understand Amano to avoid ESD by using this different structure, so would not use the circuit for a reading head of Hogg. A person of ordinary skill in the art would understand Amano to suggest a CMUT with non-exposed/layered electrodes to avoid the ESD problems of the device in the background, so would not provide ESD protection circuit on a CMUT.

Dependent claims 2-6, 9-11, 13-16, 18, and 19 depend from the independent claims 1 and 12, so are allowable for the same reasons. Further limitations patentably distinguish from cited art.

Claim 2 recites a signal trace. The top electrode may be grounded to provide patient safety. The electrode being on the top may make grounding more convenient, such as by laying a grounding plane over the electrode or extending the electrode to be a grounding plane. A trace is not inherent.

Claims 3 and 4 recite zener diodes. A person of ordinary skill would not use the zener's of Baxter with the shorting of Hogg. Hogg desires shorting, so has a transistor. A diode is not shorting. Baxter protects an ion-sensitive transistor, so is not applicable to the head protection by shorting of Hogg.

Claims 5, 6, 15, and 16 also include a diode. As discussed for claims 3 and 4, such an arrangement would not have been used with Hogg.

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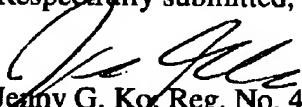
AUG 24 2007**CONCLUSION:**

Applicant respectfully submits that all of the pending claims are in condition for allowance and seeks early allowance thereof. If for any reason, the Examiner is unable to allow the application but believes that an interview would be helpful to resolve any issues, he is respectfully requested to call the undersigned at (650) 694-5810 or Craig Summerfield at (312) 321-4726.

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